

CLAIMS

1. A system for attaching apparatus and sensor devices comprising:

5 An upper portion, a first side, a second side, a front portion and a back portion constructed so as to form a platform, wherein said platform is further constructed so as to house a plurality of said apparatus and said sensors.

10 2. A system as recited in claim 1, wherein said upper portion further comprises a top surface having a plurality of plates, each of said plates constructed so as to be screwed onto said upper surface.

15 3. A system as recited in claim 2, wherein said upper portion further comprises at least two quick-release hinges constructed so as to rapidly release said upper portion of said system.

20 4. A system as recited in claim 3, wherein said first and second side portions comprise at least one air flow apparatus including filters, fans and vents, constructed so as to prevent wire and component overheating.

5. A system as recited in claim 4, wherein said platform further comprises a base portion, wherein said base portion comprises a plurality of sonar sensors.

5 6. A system as recited in claim 5, wherein said platform further comprises a plurality of quick release upper hinges, said upper hinges constructed so as to allow said upper portion to be lifted away from said front portion and said base portion.

10 7. A system as recited in claim 6, wherein said platform further comprises a plurality of gas charged lift supports, said lift supports constructed so as to control the rate of ascent and descent of said upper portion, said lift supports further constructed so as to hold said upper portion in an open position and prevent inadvertent closing of said upper portion.

15 8. A system as recited in claim 7, wherein said upper portion comprises an inner portion, said inner portion constructed so as to house said wires and said components, said inner portion
20 further comprising a wire housing system constructed so as to effectuate wire tracking, maintenance and removal, said wire housing system further constructed so as to prevent said wire from vibration.

9. A system as recited in claim 8, wherein said inner portion further comprises a plurality of brackets, said brackets constructed so as to house said components within said inner
5 portion, said brackets further constructed so as to stabilize said components and prevent vibration of said components.

10. A system as recited in claim 9, wherein said platform comprises a plurality of quick release lower hinges, said hinges constructed so as to allow said upper portion and said base to be
10 lifted away from said front portion.

11. A system as recited in claim 10, wherein said platform further comprises a support mechanism, said support mechanism further comprising a catch, a rod and a safety cable, said
15 support mechanism further constructed so as to maintain said upper portion and said base in a raised position, said safety cable further constructed so as to prevent said upper portion and said base from opening too far.

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12. A system as recited in claim 11, wherein said platform further comprises a plurality of quick release latching

mechanisms, said latching mechanisms constructed so as to allow said upper portion and base to be rapidly opened.

13. A system as recited in claim 12, wherein said platform
5 further comprises a plurality of back panels positioned on said back portion of said platform, said back panels further constructed so as to provide quick access to said inner portion of said platform.

10 14. A system as recited in claim 13, wherein said back portion further comprises a plurality of sonar sensors and an interface panel, said interface panel constructed so as to allow apparatus to be connected to said platform.

15 15. A system as recited in claim 14, wherein said platform is constructed so as to be positioned on a robotic vehicle so as to obtain and transmit data from a remote location, said platform further constructed so as to be dust, dirt and water resistant.

20 16. A robotic vehicle having a drive train and power supply comprising:

an upper portion, a first side, a second side, a front portion and a back portion constructed so as to form a platform,

wherein said platform is further constructed so as to house a plurality of apparatus and sensors;

said platform further comprising a plurality of quick release upper hinges, said upper hinges constructed so as to allow said upper portion to be lifted away from said front portion and said base portion;

said platform further comprising a plurality of gas charged lift supports, said lift supports constructed so as to control the rate of ascent and descent of said upper portion, said lift supports further constructed so as to hold said upper portion in an open position and prevent inadvertent closing of said upper portion;

said platform comprising a plurality of quick release lower hinges, said hinges constructed so as to allow said upper portion and said base to be lifted away from said front portion; and

said platform further comprising a support mechanism, said support mechanism further comprising a catch, a rod and a safety cable, said support mechanism further constructed so as to maintain said upper portion and said base in a raised position, said safety cable further constructed so as to prevent said upper portion and said base from opening too far.

17. A robotic vehicle as recited in claim 16 wherein said upper portion comprising a top surface having a plurality of plates, each of said plates constructed so as to be fastened onto said upper surface, wherein said upper portion further comprising at least two quick release hinges constructed so as to rapidly release said upper portion.

18. A robotic vehicle as recited in claim 17, wherein said first and second side portions comprise at least one air flow apparatus having a filter, fan and vent, constructed so as to prevent wire and component overheating.

19. A robotic vehicle as recited in claim 18, wherein said platform further comprises a base portion comprising a plurality of sonar sensors.

20. A robotic vehicle as recited in claim 19, wherein said upper portion comprises an inner portion, said inner portion constructed so as to house said wires and said components, said inner portion further comprising a wire housing system constructed so as to effectuate wire tracking, maintenance and removal, said wire housing system further constructed so as to prevent said wire from vibration.

21. A robotic vehicle as recited in claim 20, wherein said inner portion further comprises a plurality of brackets, said brackets constructed so as to house said components within said inner
5 portion, said brackets further constructed so as to stabilize said components and prevent vibration of said components.

22. A system for attaching apparatus and sensor devices comprising:

10 An upper portion, a first side, a second side, a front portion and a back portion constructed so as to form a platform, wherein said platform is further constructed so as to house a plurality of said apparatus and said sensors; and

15 said first and second sides each further comprising a removable panel, said removable panel constructed so as to be removable from said first and second sides, said panels further constructed so as to allow access into an inner portion of said platform.

20 23. A system as recited in claim 22, wherein inner portion, said inner portion further comprising a wire housing system constructed so as to house wires connected to said apparatus and sensors, said wire housing system further constructed so as to

effectuate wire tracking, maintenance and removal of said wires, said wire housing system further constructed so as to prevent said wire from vibration.

5 24. A system as recited in claim 23, wherein said inner portion further comprises a plurality of brackets, said brackets constructed so as to house components connected to said apparatus and sensors within said inner portion, said brackets further constructed so as to stabilize said components and prevent
10 vibration of said components.

25. A system as recited in claim 24, wherein said platform further comprises a base, said base constructed so as to connect to said platform, said platform comprising a plurality of quick
15 release hinges, said hinges constructed so as to allow said upper portion and said base to be lifted away from said front portion.

26. A system as recited in claim 25, wherein said platform and said base further comprising a support mechanism, said support
20 mechanism comprising a catch, a rod and a safety cable, said support mechanism further constructed so as to maintain said upper portion and said base in a raised position, said safety

cable further constructed so as to prevent said upper portion and said base from opening too far.

27. A system as recited in claim 26, wherein said platform
5 further comprises a plurality of quick release latching mechanisms, said latching mechanisms constructed so as to allow said upper portion and base to be rapidly opened.

28. A system as recited in claim 27, wherein said front portion
10 further comprises at least one removable panels positioned on said front portion of said platform, said front panels further constructed so as to provide quick access to said inner portion of said platform.

29. A system as recited in claim 28, wherein said platform
15 further comprises a plurality of back panels positioned on said back portion of said platform, said back panels further constructed so as to provide quick access to said inner portion of said platform.

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30. A system as recited in claim 29, wherein said back portion further comprises a plurality of sonar sensors and a interface

panel, said panel constructed so as to allow apparatus to be connected to said platform.

31. A system as recited in claim 30, wherein said platform is constructed so as to be positioned on a robotic vehicle so as to obtain and transmit data from a remote location, said platform further constructed so as to be dust, dirt and water resistant.

32. A system as recited in claim 31, wherein said back portion further comprises a back dock, said back dock constructed so as to provide access for robotic apparatus to board said vehicle.

33. A robotic vehicle having a drive train and power supply comprising:

an upper portion, a first side, a second side, a front portion and a back portion constructed so as to form a platform, wherein said platform is further constructed so as to house a plurality of apparatus and sensors;

said platform connected to a base and comprising a plurality of quick release hinges, said hinges constructed so as to allow said upper portion and said base to be lifted away from said front portion; and

said platform further comprising a support mechanism, said support mechanism further comprising a catch, a rod and a safety cable, said support mechanism further constructed so as to maintain said upper portion and said base in a raised position,
5 said safety cable further constructed so as to prevent said upper portion and said base from opening too far.

34. A robotic vehicle as recited in claim 33, wherein said upper portion comprises a top surface having a plurality of plates, each of said plates constructed so as to be attached onto said upper surface.

35. A robotic vehicle as recited in claim 34, wherein said first and second side portions each comprise a removable side panel, said side panel constructed so as to allow easy access to an inner portion of said platform.

36. A robotic vehicle as recited in claim 35, wherein said inner portion further comprising a wire housing system constructed so as to effectuate wire tracking, maintenance and removal of wires connected to said apparatus and sensors, said wire housing system further constructed so as to prevent said wires from vibration.

37. A system as recited in claim 36, wherein said inner portion further comprises a plurality of brackets, said brackets constructed so as to house components in said inner portion, said components connected to said apparatus and sensors, said brackets
5 further constructed so as to stabilize said components and prevent vibration of said components.

38. A system as recited in claim 37, wherein said back portion further comprises a plurality of sonar sensors and an interface
10 panel, said panel constructed so as to allow apparatus to be connected to said platform.

39. A system as recited in claim 38, wherein said back portion further comprises a back dock, said back dock constructed so as
15 to provide access for robotic apparatus to board said vehicle.